



PCT

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THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lee et al.  
Appl. No. : 10/511,841  
Filed : 10/19/04  
Title : METHODS AND APPARATUS FOR MOLECULAR DATA STORAGE,  
RETRIEVAL AND ANALYSIS

Grp./A.U. :  
Examiner :

Docket No.: 14859NP

Honorable Assistant Commissioner of Patents  
Alexandria, VA 22313-1450

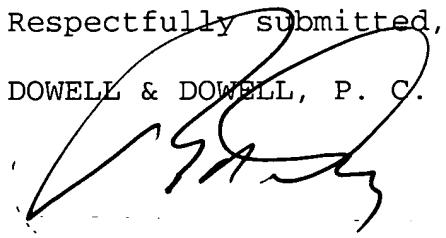
Sir:

**PTO CUSTOMER NO. 000293**

INFORMATION DISCLOSURE STATEMENT

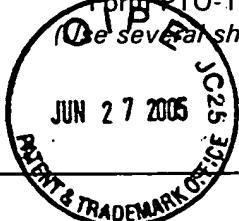
In accordance with 37 C.F.R., §§ 1.97-1.99, applicant submits the following information which may be of interest to the examiner in charge of the above referenced application for patent. Only copies of the non-US references listed on the attached Form PTO-1449 are attached.

Respectfully submitted,  
DOWELL & DOWELL, P. C.

  
Ralph A. Dowell, Reg. No.: 26,868  
Date: June 27, 2005

DOWELL & DOWELL, P.C.  
Suite 406, 2111 Eisenhower Ave.  
Alexandria, VA 22314  
Telephone: (703) 415-2555

<b>INFORMATION DISCLOSURE CITATION</b> Form PTO-1449 (Modified) (Use several sheets if necessary)		ATTY. DOCKET NO. 14859NP	SERIAL NO.
		APPLICANT LEE, Jeremy et al.	
		FILING DATE	GROUP



## U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A1	2001/0045357		Broadley, et al.			
	A2	2003/0013672		Lee, et al.			
	A3	5,795,782	18 Aug. 1998	Church et al.			
	A4	5,882,496	16 Mar. 1999	Northrup et al.			
	A5	6,004,450	21 Dec. 1999	Northrup et al.			
	A6	6,015,714	18 Jan. 2000	Baldarelli et al.			
	A7	6,067,246	23 May 2000	Heller et al.			
	A8	6,136,543	24 Oct. 2000	Anazawa et al.			
	A9	6,267,872	31 July 2001	Akeson et al.			

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		Document Number	Date	Country	Class	Subclass	Translation
	B1	WO 99/31115	1999	PCT			
	B2	EP 0 726 530 A1		EP			

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

C1	Aich, P. et al., <i>Journal of Molecular Biology</i> , 294(2), 477-485 (1999)
C2	Akeson et al., <i>Biophysical Journal</i> , 77:3227-33 (1999)
C3	Auld, et al., <i>Proc. Natl. Acad. Sci. USA</i> , 87: 323-27 (1990)
C4	Braha et al., <i>Nat Biotechnol.</i> , 18(9):1005-7 (2000)
C5	Braun, E. et al., <i>Nature</i> , 391, 775-778 (1998)
C6	Chapman et al., <i>J Physiol</i> 530(1):21-33
C7	Chou, C. F. et al., "Sorting biomolecules with microdevices", <i>Electrophoresis</i> , January 2000, 21(1): 81-90
C8	Deamer, D. W. et al., "Nanopores and nucleic acids: prospects for ultrarapid sequencing", <i>Trends Biotechnol.</i> , April 2000, 18(4): 147-51

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE CITATION</b> Form PTO-145 (Modified) (Use several sheets if necessary)		ATTY. DOCKET NO.	SERIAL NO.
		14859NP	
		APPLICANT LEE, Jeremy et al.	
		FILING DATE	GROUP
C9	Fry et al., <i>Science</i> 13(1): 124-31 (1992)		
C10	Gelbart, W. M. et al., <i>Physics Today</i> 53, September 2000, 38-44 (2000)		
C11	Gu et al., <i>Science</i> , 291(5504):636-40 (2001)		
C12	Hamill et al., <i>Pfluegers Arch. Eur. J. Physiol.</i> , 391: 85-100 (1981)		
C13	Heinemann et al., <i>Biophys. J.</i> , 54: 757-64 (1988)		
C14	Heinemann et al., <i>Biophys. J.</i> , 57: 499-514 (1990)		
C15	Hopfield, J. J. et al., "A Molecular Shift Register", <i>Science</i> , 241, p. 817 (1988)		
C16	Hoshi, et al., <i>Neuron</i> , 7: 547-56 (1991)		
C17	Hoshi, et al., <i>Science</i> , 250: 533-38 (1990)		
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C20	Kasianowicz et al., <i>Proc. Natl. Acad. Sci. USA</i> 93:13770-73		
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C22	Lewis, F.D., Wu, T., Zhang, Y., Letsinger, R.L., Greenfield, S.R., and Wasielewski, M.R. <i>Science</i> 277, 673-676 (1997)		
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C29	Ratikin A. et al., <i>Phys. Rev. Lett.</i> 86(16):3670-3673 (2001)		
C30	Robinson et al., "The Design of a Biochip: A Self-Assembling Molecular-Scale Memory Device", <i>Protein Engineering</i> , 1:295-300 (1987)		
C31	Schindler, <i>FEBS Letters</i> , 122: 77-79 (1980)		
C32	Schütz, E. et al., <i>BioTechniques</i> , 27:1218-28 (1999)		
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C34	Seeman, N. C. et al., <i>Ann. Rev. Biophys. Biomol. Struct.</i> 23, 53-86 (1994)		

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<b>INFORMATION DISCLOSURE STATEMENT</b> Form PTO-1448 (Modified) <i>(Use several sheets if necessary)</i>		ATTY. DOCKET NO.	SERIAL NO.
		14859NP	
		APPLICANT LEE, Jeremy et al.	
		FILING DATE	GROUP
C35	Sponer, J. et al., <i>Biomol. Struct. Dyn.</i> 17, 61 (1999)		
C36	Tapper and George, <i>J Biol Chem</i> , 276(41):38249-54, 2001 Oct 12		
C37	Taubes, G., <i>Science</i> 275, 1420-1421 (1997)		
C38	Vercoutere, W. et al., <i>Nat. Biotechnol.</i> , 19, 248-52 (2001)		
C39	Wang J., et al., <i>Langmuir</i> , 15, 6541-6545 (1999)		
C40	Wang, H. et al., <i>Nature Biotechnology</i> , 19:622-623 (2001)		
C41	West, et al., <i>Proc. Natl. Acad. Sci. USA</i> , 89: 10910-14 (1992)		
C42	Wonderlin et al., <i>Biophys. J.</i> , 58: 289-97 (1990)		

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